**AMENDMENTS TO THE CLAIMS**

1. (Currently amended): An image processing apparatus comprising:

a grouping unit which selects rendering strategy according to characteristics of input three-dimensional objects and groups the three-dimensional objects into groups in such a manner that the three-dimensional objects to which the same rendering strategy is applied are grouped into the same group;

a rendering processing unit which derives a three-dimensional subspace which contains the three-dimensional objects belonging to the same group to be an independent rendering unit and performs rendering processing individually on the subspace by applying the group by group different rendering strategy, and generates independent image data for each subspace; and

a consolidation unit which generates final output image data to be displayed by consolidating the image data generated for each subspace,

wherein the grouping unit groups the three-dimensional objects into groups in such a manner that the three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another.

2. (Original): The apparatus of Claim 1, wherein the rendering processing unit comprises:

a coordinate transformation unit which derives a subspace which is a quadrangular truncated pyramid through perspective projection and performs perspective transformation of the three-dimensional object; and

a rendering unit which performs individual rendering processing in the quadrangular truncated pyramid.

3. (Previously presented): The apparatus of Claim 1, wherein the grouping unit, based on motion characteristics of the three-dimensional objects, selects the rendering strategy on whether motion blurring processing is applied or not, and groups the three-dimensional objects to which the motion blurring processing is applied, into the same group.

4. (Previously presented): The apparatus of Claim 2, wherein the grouping unit, based on motion characteristics of the three-dimensional objects, selects the rendering strategy on whether motion blurring processing is applied or not, and groups the three-dimensional objects to which the motion blurring processing is applied, into the same group.

5. (Previously presented): The apparatus of Claim 1, wherein the grouping unit, based on information related to level of detail in rendering the three-dimensional objects, selects the rendering strategy in which multi-resolution rendering is applied at a resolution depending on the level of detail, and groups the three-dimensional objects to be rendered at the same resolution into the same group.

6. (Previously presented): The apparatus of Claim 2, wherein the grouping unit, based on information related to level of detail in rendering the three-dimensional objects, selects the rendering strategy in which multi-resolution rendering is applied at a resolution depending on the level of detail, and groups the

three-dimensional objects to be rendered at the same resolution into the same group.

7. (Previously presented): The apparatus of Claim 32, wherein the consolidation unit corrects dynamic range of a depth value of each pixel of the image data generated for each subspace, and consolidates the image data by comparing the corrected depth value and generates the final output image to be displayed.

8. (Cancelled)

9. (Original): The apparatus of Claim 1, wherein the rendering processing unit comprises a plurality of rendering units and distributes the rendering processing to the plurality of the rendering units according to complexity level of the rendering processing by subspace unit.

10. (Original): The apparatus of Claim 2, wherein the rendering processing unit comprises a plurality of rendering units and distributes the rendering processing to the plurality of the rendering units according to complexity level of the rendering processing by subspace unit.

11. (Original): The apparatus of Claim 1, wherein the rendering processing unit comprises a plurality of rendering units with different processing performance and assigns the rendering processing to the plurality of the rendering units, each of which has the appropriate processing performance corresponding to complexity level of the rendering processing by subspace unit.

12. (Original): The apparatus of Claim 2, wherein the rendering processing unit comprises a plurality of rendering units with different processing performance and assigns the rendering processing to the plurality of the rendering units, each of which has the appropriate processing performance corresponding to complexity level of the rendering processing by subspace unit.

13. (Original): The apparatus of Claim 1, further comprising a communication unit which receives image data rendered by subspace unit from an external distributed rendering processing device connected with the apparatus via a network, and wherein the consolidation unit consolidates the image data received from the external distributed rendering processing device with the image data generated by the rendering processing unit and generates the final output image data to be displayed.

14. (Original): The apparatus of Claim 2, further comprising a communication unit which receives image data rendered by subspace unit from an external distributed rendering processing device connected with the apparatus via a network, and wherein the consolidation unit consolidates the image data received from the external distributed rendering processing device with the image data generated by the rendering processing unit and generates the final output image data to be displayed.

15. (Original): The apparatus of Claim 13, wherein the rendering processing is assigned to a plurality of the distributed rendering devices, each of which has different network distance corresponding to level of detail in rendering by subspace unit.

16. (Original): The apparatus of Claim 14, wherein the rendering processing is assigned to a plurality of the distributed rendering devices, each of which has different network distance corresponding to level of detail in rendering by subspace unit.

17. (Currently amended): An image processing system including a plurality of image processing apparatus for exchanging information with each other via a network and performing distributed rendering processing, the system comprising:

a grouping unit which selects rendering strategy according to characteristics of input three-dimensional objects and groups the three-dimensional objects into groups in such a manner that the three-dimensional objects to which the same rendering strategy is applied are grouped into the same group;

a rendering processing unit which derives a three-dimensional subspace which contains the three-dimensional objects belonging to the same group to be an independent rendering unit and performs rendering processing individually on the subspace by applying the group by group different rendering strategy, and generates independent image data for each subspace; and

a consolidation unit which generates final output image to be displayed by consolidating the image data generated for each subspace, ~~and~~

wherein the grouping unit groups the three-dimensional objects into groups in such a manner that the three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another, and

wherein the grouping unit, the rendering processing unit and the consolidation unit are functionally distributed among the

plurality of the image processing apparatus.

18. (Currently amended): An image processing apparatus for exchanging information with other apparatus via a network, comprising at least one of function blocks of:

a grouping unit which selects rendering strategy according to characteristics of input three-dimensional objects and groups the three-dimensional objects into groups in such a manner that the three-dimensional objects to which the same rendering strategy is applied are grouped into the same group;

a rendering processing unit which derives a three-dimensional subspace which contains the three-dimensional objects belonging to the same group to be an independent rendering unit and performs rendering processing individually on the subspace by applying the group by group different rendering strategy, and generates independent image data for each subspace; and

a consolidation unit which generates final output image to be displayed by consolidating the image data generated for each subspace, ~~and~~

wherein the grouping unit groups the three-dimensional objects into groups in such a manner that the three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another, and

wherein a processing result by the function block which is not included in this apparatus is received from the other apparatus and utilized.

19. (Currently amended): An image processing method comprising dividing a space into three-dimensional subspaces which are

allowed to spatially overlap one another and performing rendering processing independently by subspace unit on [[a]] at least one three-dimensional object in each of the subspaces to generate rendering data having depth information on a pixel by pixel basis, and consolidating the rendering data of ~~the~~ at least one three-dimensional object in each of the subspaces by evaluating a distance in depth direction on a pixel by pixel basis.

20. (Currently amended): An image processing method comprising grouping a plurality of three-dimensional objects into groups in such a manner that the three-dimensional objects to which same rendering strategy is applied are grouped into the same group and performing rendering processing individually on a subspace which contains at least one ~~of the~~ three-dimensional object[[s]] belonging to the same group by applying the group by group different rendering strategy, and generating final image data to be displayed by consolidating rendering data of each subspace, wherein three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another.

21. (Currently amended): A storage medium storing a computer program executable by a computer, the program comprising:

reading array data of a plurality of three-dimensional objects;

selecting rendering strategy according to characteristics of the three-dimensional objects;

grouping the three-dimensional objects which exist in a display area into groups in such a manner that the three-dimensional objects to which the same rendering strategy is

applied are grouped into the same group;

deriving a three-dimensional subspace which contains the three-dimensional objects belonging to the same group to be an independent rendering unit;

performing rendering processing individually by subspace unit by applying the group by group different rendering strategy to generate image data for each subspace; and

generating final image data to be displayed in the display area by consolidating the image data generated for each subspace,

wherein said grouping groups the three-dimensional objects into groups in such a manner that the three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another.

22. (Previously presented): The storage medium of Claim 21, wherein the program further comprises calculating a position of each of the three-dimensional objects in a viewpoint coordinate system and determining information related to level of detail in rendering each of the three-dimensional objects based on a distance from the viewpoint, and wherein said grouping groups the three-dimensional objects which exist in the display area into the groups according to the information related to level of detail.

23. (Previously presented): The storage medium of Claim 21, wherein the rendering processing are performed in such a manner that the rendering processing for each subspace is distributed to a plurality of rendering processing units.

24. (Previously presented): The storage medium of Claim 22, wherein the rendering processing are performed in such a manner that the rendering processing for each subspace is distributed to a plurality of rendering processing units.

25. (Previously presented): The apparatus of Claim 1, wherein the rendering strategy is a rendering algorithm applied to the three-dimensional objects.

26. (Previously presented): The apparatus of Claim 25, wherein the rendering algorithm is a hidden surface removal algorithm.

27. (Currently amended): The apparatus of Claim 25, wherein the rendering algorithm is a ~~sharing~~ shading algorithm.

28. (Previously presented): The apparatus of Claim 1, wherein the grouping unit, based on information related to level of detail in rendering the three-dimensional objects, selects the rendering strategy in which defocus processing is applied at a focus depth depending on the level of detail, and groups the three-dimensional objects to which the defocus processing is applied at the same focus depth, into the same group.

29. (Previously presented): The apparatus of Claim 2, wherein the grouping unit, based on information related to level of detail in rendering the three-dimensional objects, selects the rendering strategy in which defocus processing is applied at a focus depth depending on the level of detail, and groups the three-dimensional objects to which the defocus processing is applied at the same focus depth, into the same group.

30. (Cancelled).

31. (Currently amended): The apparatus of Claim [[30]]1, wherein the grouping unit groups the intersecting three-dimensional objects, to each of which a different rendering strategy is applied, into the separate groups.

32. (Currently amended): The apparatus of Claim 1, wherein:

the rendering processing unit generates the independent image data for each subspace, the independent image data having per-pixel Z values indicating depth information on a pixel by pixel basis; and

the consolidation unit generates the final output image data to be displayed by performing Z-merge processing of the image data generated for each subspace according to the per-pixel Z values, when three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another.

33. (Currently amended): An image processing apparatus comprising:

a grouping unit which groups input three-dimensional objects into groups;

a rendering processing unit which derives a subspace which contains ~~the~~ at least one three-dimensional object[[s]] belonging to the same group to be an independent rendering unit and performs rendering processing individually on the subspace, and generates independent image data having per-pixel Z values indicating depth information on a pixel by pixel basis for each

subspace; and

a consolidation unit which generates final output image data to be displayed by ~~performing Z-merge processing of~~ consolidating the image data having per-pixel Z values generated for each subspace ~~according to the per-pixel Z values~~.

34. (New): The apparatus of Claim 33, wherein the consolidation unit which generates the final output image data to be displayed by performing Z-merge processing of the image data generated for each subspace according to the per-pixel Z values, when three-dimensional subspaces, each of which contains at least one three-dimensional object belonging to the same group, are allowed to spatially overlap one another.